

AUG 14 2007

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SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 3/19/2007 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 22511.

Date <u>8/8/07</u>	Serial # <u>10/811107</u>	Priority Application Filing Date <u>11/28/03</u>
Your Name <u>M. heus</u>		Examiner # <u>73172</u>
AU <u>9502</u>	Phone <u>209-1838</u>	Room <u>5039</u>
In what format would you like your results? Paper is the default. <input checked="" type="checkbox"/> PAPER <input type="checkbox"/> DISK <input type="checkbox"/> EMAIL		

If submitting more than one search request form, please prioritize the searches in order of need.

Where have you searched so far on this case?

Circle: USPAT USPGPUB DWPI EPO Abs JPO Abs IBM TDB
 Other: _____

What relevant art have you found so far? Please attach citations or Information Disclosure Statements.

What types of references would you like? Please checkmark:

Primary Refs Nonpatent Literature Teaching Refs
 Secondary Refs Foreign Patents Other

If this is a "Fast & Focused Search" request, put a checkmark here: And then please speak in-person immediately with the
EIC2800 Technical Information Specialist or with an EIC2800 Searcher. A "Fast & Focused Search" is completed in 2 hours (maximum). The search must be on a very specific topic
and meet certain criteria. The criteria are posted in EIC2800 and on the STIC NPL Web Page at
<http://uspto-a-patr-2/siraapps/stic/npl/nplsearch.htm>

In your own words, what is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 1-4

MOS

Problem: See Pages 1+2
Solution: " 11 2+3

Staff Use Only	Type of Search	Vendors
Searcher: <u>Michael Heus</u>	Structure (#) _____	STN _____
Searcher Phone: <u>571-272-2663</u>	Bibliographic <input checked="" type="checkbox"/>	Dialog <input checked="" type="checkbox"/>
Searcher Location: STIC-EIC2800, JEF-4B68	Litigation _____	Questel/Orbit _____
Date Searcher Picked Up: <u>8/15/2007</u>	Fulltext _____	Lexis-Nexis _____
Date Completed: <u>8/16/2007</u>	Patent Family _____	WWW/Internet _____
Searcher Prep/Rev Time: <u>97</u>	Other _____	Other _____
Online Time: <u>81</u>		

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[File 2] INSPEC 1898-2006/Jan W2
 [File 6] NTIS 1964-2006/Jan W4
 [File 8] Ei Compendex(R) 1970-2006/Jan W4
 [File 34] SciSearch(R) Cited Ref Sci 1990-2006/Jan W4
 [File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec
 [File 35] Dissertation Abs Online 1861-2006/Jan
 [File 65] Inside Conferences 1993-2006/Jan W5
 [File 99] Wilson Appl. Sci & Tech Abs 1983-2006/Apr
 [File 144] Pascal 1973-2006/Jan W2
 [File 23] CSA Technology Research Database 1963-2006/Jan
 [File 103] Energy SciTec 1974-2006/Jan B1
 [File 31] World Surface Coatings Abs 1976-2006/Jan
 [File 95] TEME-Technology & Management 1989-2006/Jan W5
 [File 56] Computer and Information Systems Abstracts 1966-2006/Aug
 [File 57] Electronics & Communications Abstracts 1966-2006/Aug
 [File 68] Solid State & Superconductivity Abstracts 1966-2006/Jan
 [File 60] ANTE: Abstracts in New Tech & Engineer 1966-2006/Jan
 [File 293] Engineered Materials Abstracts 1966-2006/Jan
 [File 239] Mathsci 1940-2005/Feb
 [File 256] TECINFO SOURCE 82-2005/DEC

Set Items Description

S1 5903865 S TRANSISTOR???? OR MOS OR METAL()OXIDE()SEMICONDUCTOR??? OR METALOXIDE()SEMICONDUCTOR??? OR NMOS OR PMOS OR MOSFET OR SEMICONDUCTOR??? OR SEMI()CONDUCTOR??? OR SWITCH??? OR IC OR I()C OR INTEGRATED()CIRCUIT???? OR WAFER???? OR CHIP??? OR MICROCHIP??? OR MICRO()CHIP??? OR CIRCUIT???

S2 1084653 S (MEMOR????? OR FLASH OR STOR???? OR BUFFER???? OR CACHE) (3N) (CELL OR CELLS OR ARRAY??? OR Matri?????) OR MEMOR????? OR DRAM OR D()R()A()M OR DYNAMIC()RANDOM()ACCESS()MEMORY OR SRAM OR S()R()A()M OR SYNCHRONOUS()DYNAMIC()RANDOM()ACCESS OR RAM OR R()A()M OR RANDOM()ACCESS

S3 180713 S (ADDITIONAL OR OTHER OR MORE OR ADDED OR FRESH OR NEW OR INCREAS???? OR FURTHER OR SUPPLEMENT???? OR ANOTHER) (3N) (LOAD????? OR CAPACITANC??? OR INDUCTANC???)

S4 350897 S (SOFT OR RECOVER????? OR GARBL?????) (2N) (ERRORS OR MESSAG??? OR DEFECT???? OR GLITCH????) OR VULNERAB????????? OR SUSCEPTIB????

S5 145483 S DIFFUSION(3N) (LAYER????? OR MATERIAL????? OR SUBSTANC????? OR AREA??? OR REGION????? OR SUBSTRATE????? OR FILM???)

S6 251922 S (WELL????? OR TRENCH????? OR VIA OR VIAS OR GROOVE?????) (3N) (AREA????? OR REGION??? OR PART????? OR SECTION????? OR LAYER?????)

S7 840736 S (HIGH????? OR INCREAS??? OR LARG???? OR RAIS???? OR BOOST???? OR AUGMENT????) (3N) CONCENTRATION????

S8 121472 S (IMPURIT????? OR DOPING OR DOPE??? OR DOPANT OR ADDITIVE??? OR ION() IMPLANTATION OR DONOR OR ACCEPTOR OR ADMIX?????) (3N) CONCENTRATION???

S9 544837 S (MINIM????? OR LOWER????? OR LOW OR REDUC????? OR ATTENUAT????? OR DECREAS????? OR LESS????? OR LIMIT????? OR MITIGAT????? OR SHORT????? OR FEW OR FEWER) (3N) (SOFT()ERROR OR DEFECT??? OR GLITCH????? OR DEGRAD????? OR DETERIORAT????? OR DECLIN????? OR DEGENERAT????? OR AREA OR SPAC??? OR REAL()ESTATE)

S10 0 S S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7 AND S8 AND S9

S11 46 S S1 AND S2 AND S3 AND S4

S12 0 S S11 AND S5

S13 0 S S11 AND S6

S14 0 S S11 AND S7

S15 0 S S11 AND S8

S16 5 S S11 AND S9

S17 4 RD (unique items)

S18 0 S S1(3N)S2(3N)S3(3N)S4

S19 459 S S1(3N)S2(3N)S4

S20 8 S S19 AND S3

S21 3 RD (unique items)

S22 5 S S19 AND S5

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S23 2 RD (unique items)
S24 2 S S19 AND S6
S25 2 RD (unique items)
S26 0 S S19 AND S7
S27 0 S S19 AND S8
S28 41 S S19 AND S9
S29 80 S S1 AND S4 AND S5
S30 4 S S29 AND S6
S31 3 RD (unique items)
S32 5 S S29 AND S7
S33 3 RD (unique items)
S34 1 S S29 AND S8
S35 3 S S29 AND S9
S36 3 RD (unique items)
S37 0 S S29 AND S3
S38 27 S S1(3N)S3(3N)S9
S39 0 S S38 AND S4
S40 0 S S38 AND S5
S41 0 S S38 AND S8
S42 30 S S2 AND S4 AND S5
S43 0 S S42 AND S3
S44 0 S S42 AND S9
S45 0 S S42 AND S8
S46 17 S S4(3N)S5
S47 6 RD (unique items)
S48 6 S S4(3N)S8
S49 5 RD (unique items)
S50 0 S S38 AND S7
S51 0 S S42 AND S7
S52 3 S S21 NOT S17
S53 2 S S23 NOT (S17 OR S21)
S54 2 S S25 NOT (S17 OR S21 OR S23)
S55 3 S S31 NOT (S17 OR S21 OR S23 OR S25)
S56 3 S S33 NOT (S17 OR S21 OR S23 OR S25 OR S31)
S57 0 S S34 NOT (S17 OR S21 OR S23 OR S25 OR S31 OR S33)
S58 3 S S36 NOT (S17 OR S21 OR S23 OR S25 OR S31 OR S33 OR S34)
S59 6 S S47 NOT (S17 OR S21 OR S23 OR S25 OR S31 OR S33 OR S34 OR S36)
S60 5 S S49 NOT (S17 OR S21 OR S23 OR S25 OR S31 OR S33 OR S34 OR S36 OR S47)
S61 27 S S38 NOT (S17 OR S21 OR S23 OR S25 OR S31 OR S33 OR S34 OR S36 OR S47 OR S49)
S62 15 RD (unique items)

S63 25 S S42 NOT (S17 OR S21 OR S23 OR S25 OR S31 OR S33 OR S34 OR S36 OR S38 OR S47 OR S49)

S64 9 RD (unique items)

S65 39 S S11 NOT (S17 OR S21 OR S23 OR S25 OR S31 OR S33 OR S34 OR S36 OR S38 OR S42 OR S47 OR S49)

S66 12 RD (unique items)

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[File 344] Chinese Patents Abs Jan 1985-2006/Jan
 [File 347] JAPIO Dec 1976-2007/Mar (Updated 070809)
 [File 350] Derwent WPIX 1963-2007/UD, UM & UP=200744
 [File 371] French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	5084707	S TRANSISTOR???? OR MOS OR METAL()OXIDE()SEMICONDUCTOR??? OR METALOXIDE()SEMICONDUCTOR??? OR NMOS OR PMOS OR MOSFET OR SEMICONDUCTOR??? OR SEMI()CONDUCTOR??? OR SWITCH??? OR IC OR I()C OR INTEGRATED()CIRCUIT??? OR WAFER??? OR CHIP??? OR MICROCHIP??? OR MICRO()CHIP??? OR CIRCUIT???
S2	1254094	S (MEMOR????? OR FLASH OR STOR???? OR BUFFER???? OR CACHE) (3N) (CELL OR CELLS OR ARRAY??? OR Matri?????) OR MEMOR????? OR DRAM OR D()R()A()M OR DYNAMIC()RANDOM()ACCESS()MEMORY OR SRAM OR S()R()A()M OR SYNCHRONOUS()DYNAMIC()RANDOM()ACCESS OR RAM OR R()A()M OR RANDOM()ACCESS
S3	108784	S (ADDITIONAL OR OTHER OR MORE OR ADDED OR FRESH OR NEW OR INCREAS???? OR FURTHER OR SUPPLEMENT???? OR ANOTHER) (3N) (LOAD????? OR CAPACITANC??? OR INDUCTANC???)
S4	60538	S (SOFT OR RECOVER????? OR GARBL?????) (2N) (ERRORS OR MESSAG??? OR DEFECT???? OR GLITCH????) OR VULNERAB????????? OR SUSCEPTIB???
S5	68195	S DIFFUSION(3N) (LAYER????? OR MATERIAL????? OR SUBSTANC????? OR AREA??? OR REGION????? OR SUBSTRATE????? OR FILM???)
S6	294723	S (WELL????? OR TRENCH????? OR VIA OR VIAS OR GROOVE?????) (3N) (AREA????? OR REGION??? OR PART????? OR SECTION????? OR LAYER?????)
S7	82239	S (HIGH????? OR INCREAS??? OR LARG??? OR RAIS??? OR BOOST???? OR AUGMENT????) (3N) CONCENTRATION????
S8	32370	S (IMPURIT????? OR DOPING OR DOPE??? OR DOPANT OR ADDITIVE??? OR ION()IMPLANTATION OR DONOR OR ACCEPTOR OR ADMIX?????) (3N) CONCENTRATION???
S9	372267	S (MINIM????? OR LOWER????? OR LOW OR REDUC????? OR ATTENUAT????? OR DECREAS????? OR LESS????? OR LIMIT??? OR MITIGAT????????? OR SHORT????? OR FEW OR FEWER) (3N) (SOFT()ERROR OR DEFECT??? OR GLITCH??? OR DEGRAD????? OR DETERIORAT????? OR DECLIN????? OR DEGENERAT????? OR AREA OR SPAC??? OR REAL()ESTATE)
S10	93689	S IC=(H01L-027/088 OR H01L-027/092 OR H01L-027/10 OR H01L-027/11 OR H01L-029/78)
S11	27267	S MC=(U11-C18B5 OR U13-C04B1B OR U14-A03B1)
S12	0	S S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7 AND S8 AND S9
S13	54	S S1 AND S2 AND S3 AND S4
S14	4	S S13 AND S5
S15	11	S S13 AND S6
S16	1	S S13 AND S7
S17	4	S S13 AND S8
S18	6	S S13 AND S9
S19	20	S S13 AND S10
S20	7	S S19 AND S11
S21	0	S S1(3N) S4 (3N) S5 (3N) S9
S22	2	S S1(3N) S4 (3N) S5
S23	2	S S2(3N) S4 (3N) S5
S24	3	S S1 AND S4 AND S5 AND S7 AND S9
S25	3	S S1 AND S4 AND S5 AND S8 AND S9
S26	35	S S1(3N) S4 (3N) S9
S27	1	S S26 AND S3
S28	1	S S1(3N) S3 (3N) S4 (3N) S9
S29	11	S S26 AND S2
S30	2	S S26 AND S5
S31	3	S S26 AND S6
S32	0	S S26 AND S7
S33	0	S S26 AND S8
S34	3	S S26 AND S10
S35	2	S S26 AND S11
S36	1	S S16 NOT S14
S37	3	S S17 NOT (S14 OR S16)

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S38 5 S S18 NOT (S14 OR S16 OR S17)
S39 6 S S20 NOT (S14 OR S16 OR S17 OR S18)
S40 2 S S22 NOT (S14 OR S16 OR S17 OR S18 OR S20)
S41 2 S S23 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22)
S42 3 S S24 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23)
S43 2 S S25 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24)
S44 0 S S27 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25)
S45 0 S S28 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25 OR S27)

S46 2 S S30 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25 OR S27 OR
S28)

S47 2 S S31 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25 OR S27 OR
S28 OR S30)

S48 3 S S34 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25 OR S27 OR
S28 OR S30 OR S31)

S49 0 S S35 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25 OR S27 OR
S28 OR S30 OR S31 OR S34)

S50 6 S S15 NOT (S14 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25 OR S27 OR
S28 OR S30 OR S31 OR S34 OR S35)

S51 7 S S29 NOT (S14 OR S15 OR S16 OR S17 OR S18 OR S20 OR S22 OR S23 OR S24 OR S25 OR
S27 OR S28 OR S30 OR S31 OR S34 OR S35)